INDIANAPOLIS RADIO CLUB, INC W9JP Founded 1914

INDY HAM RADIO NEWSLETTER
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REGULAR MEETINGS: On the 2nd & 4th Frlidays at 8:00 PM in the United Christian Mission Bldg. 222 S. Downey Ave.

Pres. Jim Sugioka W9CKB 235 S. Ritter 356-2839 V. P. Art Schultz W9BR
Trustee Ron Williams W9JVF 1147 N. Emerson 359-5278 Sect Carry Carender WB9LID
Editor Bob Osterhous W9PSE 1355 E. 56th 255-1522 Treas Bill Lueth W9AI
WA9YCA,--- Chf Op. Ben Gaither ---

PROGRAM MEETING: FRIDAY NIGHT October 26th NOVICE NIGHT"..... Doug Loughmiller WB9KPC, Dan McDermet Wn9JDS, Vernon Miller WN9KXL, and Tom Chance WN9KWS will present Novice Night to the IRC. Each person will have a project of his own and give a short talk, answer questions, and demonstrate equipment. A brief outline follows:

OCT 26th

Proj #1. Dan McDermet WN9JDS. MICROMOUNTAINEER, this is a 40 meter CW tran ceiver that appeared in August 73 issue QST.

Proj #2. Vernon Miller WN9KXL will show an electronic "bug" of his own design.

Proj #3. Doug Loughmiller WB9KPC (Tech) will present his version of the Pip-Swuawk" which is a 2 meter FM receiver from the July 1971 QST. This was built for Novicd night to show W4BW Prose Walker that all 2 meter men are not "appliance operators".

Proj #4 Tom Chance WN9KWS will show a QRP attachment for his home brew VFO to enable it to run 30 watts output and is his own design. (30 Watts is QRP ?? Ed.)

"TECHNICIAN DO-NUTS" The Do-nuts served after the meeting will also be a form of home brew as they will be prepared by Doug WB9KPC (Tech) at the bakery where he works. This will top off the Novice Home brew night with something better tasting than home brew!

NEXT MEETING:
AWARDS DINNER: NOVEMBER 9th, 1973 AWARDS OF APPRECIATION DINNER
Location - Program & Winner to be announced.

CANOE REGATTA W9JP/9 IRC helps Hoosier Canoe Regatta for second year by providing communications from HQ. Keystone & Fall Creek to Camp Belzer 8 KM and 71 st St. 16 KM points, with mobiles along the way to call-in from various points. Saturdays helpers were: Bill Lueth W9AI, Mel Peterson WA9ZXS, Gary Hughes K9LNX, Ben Gaither WA9YCA and Bob W9PSE. Sundays Crew on 2 FM 146.88 simplex were: Ben Gaither WA9YCA, Bill Fleming WA9VPU, and Bob Osterhous W9PSE, Tom Chance Wn9KWS. All those who helped received vy nice "REGATTA" patches from Bob Annis showing their appreciation for our help. W9AI, WA9VPU & W9PSE now have patches for both years 1972 - 73.

GIH The IRC will be in on the planning of next years 3rd Greater Indianapolis Hamfest represented by a committee consisting of Bill Johnson W9BUQ, Louie Linthecome, K9EAT and Art Schultz, W9BR, The GIH Comm. will elect officers at it first meeting in Oct. 73. The first meeting will be to locate a better site for the event. The Indiana Fairgrounds is being considered strongly for 1974.....

SPLATTER: Ron Williams Dx..pedition to Gibralter will be over Thanksgiving and his call will be ZB2CS. Ralph Mays long time member of IRC is in the Hospital- Methodists with a bad leg his room is 826B. RADIO SIGNALS MAY BE FROM "OTHER WORLD" Moscow - Soviet scientists have picked up radio signals which could come from a technically advanced civilization. Tass reported. 30 Soviet Scientists are working on signals from space which will lead to other Astrophysical discoveries. (from Indpls Star paper.) Agence France -Presse

Program Review by: Arthur J. Schultz, W9BR Oct. 14, 1973

Approximately 40 Members and Guests attended the 12 October meeting and heard Hank Wolfla, K9LZJ present a talk and slide show covering the electronic medical instrumentation used currently at Community Hospital, where Hank serves as Manager of the Electronics Division.

Extensive radio and wire communication is held with the various City Emergency Services, including other hospitals and personnel. Personnel communication is by a Radio Pager, a small instrument operating on 100 kilohertz having the capability to buzz in one's pocket, alerting the wearer to respond to the call.

In addition to the usual electronic medical equipment, there are some rather exotic systems such as the Echo Cardiogram using energy at 3 Mhz, which is applied to the body to plan a cross section thru the heart to determine the structure, condition and thickness of the heart muscles and walls for painless, non-sanguinary diagnostic determination of the heart. A complex treadmill whose speed and inclination may be easily varied, together with a computor, serve to determine heart functicn under exercise and muscular stress. The speed can be varied from 1 to 10 MPH and the incline from level to a 45 degree slope. Hank said that running 10 MPH up a 45 slope was a bit much. The computor measures the pulmonary function and determines the life function, metabolism, oxygen diffusion thru cells and production of carbon dioxide.

Extensive open heart surgery equipment measures vital functions during major surgery; such as blood pressure by an electronic sphygmomanometer, both venal and arterial; oral and rectal body temperatures, ECG and EKG. One life support system assists the patient in breathing when this function is impaired. This Ventilator connects to the patient's lungs via the throat and tubing, feeding-in a carefully controlled air supply at a breathing pulsed rate. We humans have to sigh once in a while, why? Nobody seems to know, so this Ventilator is programmed to supply a sigh every once in a while.

Coronary care is done in a special area where nurses can view at all times from a Nurse's station all cardiac patients in intensive care. Other rooms are dedicated to accidents, ie, the Trauma Room, where emergency patients are brought and where complete and extensive operational equipment and instrumentation is always kept at the ready for any emergency, truly a lifesaving room.

Hank described a special system which he engineered for a staff doc doing film ear surgery. The doc wanted an optical record of his diagnostic and observational work. Hank used a light beam splitter, connected to the microscope used by the doc in his ear work, one of the beams feeding the Doc's eye, the other feeding into the optical input of a closed circuit TV and a magnetic TV recorder, where the data is canned up for future use. One of the newest experimental areas in medicine is cell stimulation by electrical currents. In one of these applications, controlled electrical currents are directed into the diseased innerear organ of the ear and hearing is improved or restored by repeated treatments.

The entire hospital complex can operate on its own emergency electrical power generators. Twin sub-stations bring in 34,000 volts, three phase, stepped down to 4160 volts, then into the building at 208 volts, three phase. Clear plastic electrical power plugs are used on all power cords so that correct connections can be readily observed. Zero errors must be maintained. Other large system services are used in a modern hospital such as a pheumatic tube system to carry small items all over the complex. Audiometers for hearing measurements. Computors in the computor center and the IBM 360 and the 370. We were all greatly impressed by these highly developed applications for Electronics and made aware of the need for competent personnel to engineer and maintain and train in the use of highly sophisticated instrumentation. Hank, you get an A for your excellent program and your engaging delivery. Come back and talk to us again, as soon as you spend another million dollars on new gear.